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## ABSTRACT

A questionnaire was developed to evaluate the effectiveness of Fox Valley Technical College's (FVTC's) marketing communications with prospective students. The literature on customer service, marketing communications, and institutional image was reviewed, and 17 construct criteria and 7 content criteria were developed as the framework for the questionnaire. A formative committee directed development of the questionnaire's content and design. After a draft questionnaire had been developed and finalized by a summative committee review, it was pilot tested with a sample of 25 prospective students who had made inquiries regarding FVTC within the past 6 months. Because only 1 response was received, 24 additional prospective FVTC students were asked to evaluate the questionnaire. Three responded. As a result of the pilot test, demographic and admissions status items were added to the questionnaire. In view of the low response to the pilot survey, it was recommended that the questionnaire be used as a telephone survey. (The bibliography lists 26 references. Appended are the following: lists of validators and formative and summative committee members; feedback document from summative committee review; questionnaire pilot feedback form; questionnaire; review of other questionnaires; criteria for questionnaire on marketing communications; and cover letter used in questionnaire's pilot test.) (MN)

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DEVELOPMENT OF A QUESTIONNAIRE TO EVALUATE FOX VALLEY  
TECHNICAL COLLEGE'S MARKETING COMMUNICATIONS  
WITH PROSPECTIVE STUDENT INQUIRIES

Leadership

Susan A. May

Fox Valley Technical College

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A practicum report presented to Programs for Higher Education  
in partial fulfillment of the requirements for the degree of  
Doctor of Education

Nova Southeastern University

January, 1997

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by

Susan A. May

January, 1997

The problem addressed in this study was that Fox Valley Technical College (FVTC) did not have an evaluation instrument to be used in the evaluation of its marketing communications with prospective program student inquiries. The purpose of the study was to develop a questionnaire to be used for this purpose as a direct mail survey of prospective program students who had experienced the college's pre-application communications. The research question was, "What is the appropriate and valid content of a questionnaire developed to evaluate FVTC's marketing communications with prospective student inquiries?"

The procedures for this study involved a review of the literature, establishing criteria for the questionnaire, validation of the criteria, review of other questionnaire designs, and the actual development of the questionnaire involving a formative committee. A draft of the instrument was developed, a summative committee was used to review and evaluate the product, the instrument was pilot tested with a sample group, and the final draft was modified based on the feedback and testing.

The review of the literature validated the need for FVTC to develop the questionnaire. Seventeen construct criteria and seven content criteria were developed as the framework for this questionnaire. The formative committee directed the development of this questionnaire in both its content and design. A draft of the instrument was developed and finalized after review by the summative committee and pilot testing with an actual sample group.

The study concluded that the questionnaire would serve as a viable evaluation instrument for FVTC in attaining customer feedback, and that having been tested for validity and reliability, the instrument was ready for use in a subsequent evaluation study. It was recommended that the questionnaire be utilized in an evaluation study of FVTC's marketing communications, that ultimate results be analyzed, communicated, and used as the basis for process improvement, that additional research be done to assess the direct impact of marketing communications on enrollment, and that this work be shared with the professional educational community.

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## Chapter 1

### INTRODUCTION

Fox Valley Technical College (FVTC) is one of Wisconsin's 16 technical colleges within the Wisconsin Technical College System and serves a five county area with a district population base of almost 400,000. The college's main campus is located in Appleton, Wisconsin with a branch campus in Oshkosh and regional center facilities in Chilton, Clintonville, Neenah, Waupaca, and Wautoma.

The mission of FVTC is "to help individuals reach their potential by providing education and training for employment. We seek to build and maintain an effective workforce that supports the economic growth and stability of our communities" (Fox Valley Technical College, 1995, p. 20). In fulfillment of this mission, the college offers over 60 associate of applied science degree and technical diploma programs, as well as a number of certificates, apprenticeship programs, and basic skills programming. Additionally, a wide variety of continuing education programming is delivered, including extensive contract training and technical assistance for business, industry, and government. Through the occupational areas of business, health, service, and industrial technology, as well as general education, FVTC serves approximately 42,000 individuals and 4,500 FTE (full time equivalency) in student enrollment each year. FVTC is accredited as an institution of higher education by the North Central Association of Colleges and Schools (NCA).

#### Nature of the Problem

Fox Valley Technical College has experienced some decline in its degree program enrollment over the last five years. In 1993, the college developed and implemented a new marketing communications strategy to address prospective program student inquiries to the institution. This strategy involves a systematic series of communications with each individual inquiry, including the direct mailing

of letters and publications, personal phone calls, and the encouragement to make a campus visit. This communication process is quite automated by a computer software package that serves as a database and student tracking system called the Enrollment Management Action System (EMAS). Since the implementation of this strategy, there has been no evaluation of this effort from a customer or prospective student standpoint. To accomplish such an evaluation, an evaluation instrument or questionnaire was needed. The problem was that the college did not have an evaluation instrument to be used in the evaluation of its marketing communications with prospective program student inquiries.

#### Purpose of the Study

The purpose of this study was to develop a questionnaire to be used in the evaluation of Fox Valley Technical College's marketing communications with prospective program student inquiries. The questionnaire was intended to be administered as a direct mail survey of prospective program students who have experienced the college's pre-application communications.

#### Significance to the Institution

The ability of Fox Valley Technical College (FVTC) to grow through increased enrollment in the next several years is critical to its long term financial stability and overall impact in the district that it serves. The college needs to make certain that effective marketing communication strategies are in place to positively influence prospective students who make inquiry for degree program enrollment at the institution and that they receive excellent customer service from FVTC in their college choice process.

#### Relationship to Seminar

One of the key roles of a leader as presented in the seminar on leadership is that of producing change. Change is important, but should not be made rashly, without taking the time to really assess the situation, and when possible, should

be based on some systematic analysis or evaluation. This practicum supports the notion of continuous improvement in organizations through change agent leadership, involving the development of an evaluation tool to systematically approach a problem. Leaders need to be able to ask questions, the right questions, of the constituencies they serve or seek to serve. Good decisions and leadership directions are based on a solid foundation of data and information.

#### Research Question

The research question that was addressed in this study was, "What is the appropriate and valid content of a questionnaire developed to evaluate Fox Valley Technical College's marketing communications with prospective student inquiries?"

#### Definition of Terms

For the purpose of this practicum, the following terms needed clarification:

Conversion. The process of moving from one category, e.g. inquiry, in the admissions process to another, e.g. applicant. Generally, conversion is referred to as percentage rate.

Inquiry. This involves the action of an individual to initiate a contact with an organization expressing some interest in its products or services and/or to obtain additional information.

Market research. This is the systematic design, collection, analysis, and reporting of data and findings relevant to a specific marketing situation or problem.

Matriculation. This term refers to the point of actual enrollment of a student in an educational institution.

Qualifying. This sales strategy involves making a determination, through collecting information from a prospective customer, as to the likelihood that the customer will purchase the product or service that an organization has to offer.

Student tracking system. This refers to a database to collect information needed by the college that stores the information in a way that facilitates retrieval and easily disseminates the information in a useful format to those who need it.

## Chapter 2

### REVIEW OF THE LITERATURE

Focusing on the perspective of attracting prospective students (new customers) to a post-secondary institution, this review of literature begins by addressing the concept of customer service, including organizational responsiveness, effective marketing communications, and systems to support service and communications. Secondly, the concept of institutional image is reviewed as a factor and its impact on college choice by students and parents. The review further addresses the concept of market research and how it can be used to both improve service and better understand customer perceptions. Finally, the topic of questionnaire design and development is reviewed as a research tool to enlist customer feedback.

#### Customer Service and Prospective College Students

"Today's competitive environment requires good customer service, to which universities are no exception. Those who ignore this principle may well experience declining enrollments and empty classrooms, as students go where they feel welcomed" (Trawick & Powers, 1992, p. 17). Disend (1991) contends that a challenge that we all face is the fact that customers today expect more than ever before (p. 104). Yet, relatively little is known about students' perceptions of admission procedures or the potential impact marketing has on students' perceptions of a given college (Trawick & Powers, 1992, p. 13). In addition to the customer service challenges colleges face with prospective students, "many faculty members recoil at the suggestion that their students--or worse yet, the professors themselves--should be considered customers" (Ryan, 1993, p. 40).

Trawick and Powers (1992) state that "the student's or parent's perception of the admission process is an important area that should be investigated." Their study involved the nature and level of customer service which is afforded to

prospective students or parents on initial contact with an institution of higher education (p. 13). The reality is that “. . . in the inescapable competition of higher education today, if one school doesn’t manage to make intellectual and emotional sense out of the student’s college confusion, another certainly will” (Esteban & Apel, 1992, p. 21).

### Responsiveness to Customer Inquiries

The research conducted by Trawick and Powers (1992) suggests that “. . . there are a number of factors seen as being extremely important by students and parents in the application process which were said to be insufficiently handled at the colleges or universities in question” (p. 13). These factors or measures of customer interaction include attitude, friendliness, speed, knowledge, and offer of assistance (p. 14).

In the research conducted on college direct mail marketing by Esteban and Apel (1992), the average response time for colleges to reply to letters of request for information was about 20 days. Of the responses, 44% of the colleges made only one reply mailing. The average number of mailings per college was 2.5 and 18% of the institutions sent five or more mailings. The most common items received (in terms of the percentage of colleges sending) were: (a) admission applications, 96%, (b) viewbooks, 80%, and (c) letters, 61%. Other items that were sent by more than 18% of the colleges included financial aid brochures, newsletters, overviews, and visiting pieces (p. 22).

The work of Esteban and Apel (1992) expresses some concern about what was not sent by colleges in response to prospective students’ requests for information: 20% did not send a viewbook, 68% did not send a financial aid brochure, only two pieces and 16 letters were developed for and addressed to parents, 92% did not send a college catalog, and 44% did not write a letter (of those, only 23% sent more than one) (p. 23). Trawick and Powers (1992)

contend that as customers search for information during the stage of choosing a college, the only information they probably have and their total impression of the school are based on a conversation with the admissions department and/or whatever information they have been sent (pp. 13-14).

### Marketing Communications

Part of a college's overall service strategy and important variable for enrollment success as noted by Williams and Crockett (1993) is the process of communicating with prospective students. The goal of an effective communication program is to achieve targeted yield rates from each stage of admission to the next, beginning with inquiry to the college and concluding with a final decision to enroll, or attend another institution, or some other choice. Colleges can manage and change conversion rates from inquiry through matriculation by managing the type, amount, and quality of communications (pp. 45-46). "Our work with hundreds of colleges and universities has confirmed the importance of a well-designed and comprehensive personal, phone, and written communication system as the key strategy in achieving higher conversion and yield rates from the inquiry stage to the matriculant stage" (Crockett, 1995, p. 4).

While some individuals are skeptical of an institution's ability to influence its enrollment in any substantial way due to the constraints of mission, resources, geography, competitive position, and tradition, Clagett and Kerr (1994) contrast their views to these skeptics by indicating that ". . . it is possible to influence enrollment in desired ways . . . but an essential ingredient is timely, focused information" (p. 1). Arden and Whalen (1991) contend that ". . . the printed piece remains an essential channel to reach prospective students . . . [and] . . . while these publications should strive to put the institution's best foot forward, they should never distort reality or make unwarranted claims" (p. 5).

Crockett (1995) recommends that colleges design different communication systems for their various market segments, e.g. juniors, seniors, adults, transfers, and international students to more effectively address their interests and needs. He also proposes that “. . . generally the most effective means of influence and persuasion result from a direct and personal contact, especially when the goal is enrollment” (p. 4). A significant number of colleges have increased their use of the telephone to qualify their inquiry pools, implementing a strategy called telecounseling, which is proving to be a highly effective and cost-efficient recruiting technique. It allows a college to communicate in person and build relationships with the prospective students most likely to enroll and it also identifies prospects who are no longer interested, so the investment in these prospects can cease (Bryant, 1994, p. 12).

Carter (1993) indicates that the goal of college marketing communications tools is to elevate the institution to the position that it seeks in the marketplace and whether these tools are brochures, letters, radio spots, or presentations, they are the bridge to the college’s constituencies (p. 46). Disend (1991) concurs and describes an organization’s correspondence as an interaction--a moment of truth--and recipients develop perceptions about you, your organization, and your products and services based on the way the correspondence looks and reads (p. 189).

“Many colleges’ written communications are not sufficiently extensive or targeted to build and sustain the interest of prospective students from inquiry through matriculation stages” (Crockett, 1995, p. 5). Arden and Whalen (1991) concur that “. . . you want readers to take some sort of action, form an opinion, purchase the product, contribute money . . . [and] . . . that means that publications should persuade as well as inform” (p. 5). Crockett (1995) further contends that the impact of written communications is frequently lost because too

often colleges bundle promotional messages and materials in a very limited response mailing to potential students with a limited number of contacts (p. 5).

Since letters play an important role in the written communications process, Crockett (1995) provides some guidelines for effective letter writing. Letters to prospective students should: (a) be personalized; (b) be signed by different personnel depending on the letter's message and purpose; (c) often use bullets and postscripts; (d) emphasize benefits and minimize features; (e) include facts and/or quotes to support claims; and (f) conclude with a call to action (p. 5). "Letters can be cost effective, credible, and current. They can establish a personal level of dialogue and impressions that other strategies can't. Yet, as proven and powerful a marketing tool as they are, letters clearly represent a largely missed opportunity for most schools" (Esteban and Apel, 1992, p. 23). Several authors strongly recommend the use of postscripts in marketing communication letters, suggesting that the P.S. stands out, making it one of the most highly read parts of the letter (Esteban & Apel, 1992, p. 23; Kobs, 1991, p. 213; Williams & Crockett, 1993, p. 53).

Based on interviews with a number of college marketing specialists from across the country, Carter (1993) developed a summary of guidelines for successful marketing communications:

1. Segment your audiences. Most institutions fail to do this, treating everyone as the general public.
2. Convey your campus position. Once the market research has shown what your audience needs to hear, refine and express that idea through your communications.
3. Express the same theme in various communications with your audiences. Do not overlook opportunities to reinforce your message.

4. Frame a message in the context of meeting the audience's needs. It is especially important to maintain an external focus when writing direct mail copy.
5. Ensure that your editorial content guides your design. The design should help advance the message, not confuse it.
6. Create appealing materials that can compete with everything else that is sent as direct mail.
7. Ensure the cost-effectiveness of direct mail by giving the piece a compelling message that outlines the benefits to the reader and give the reader a clear and simple way to respond.
8. Regular solicitation of opinions from your audiences and evaluation of what is being done will assist you in understanding what is working and what is not. Track the response rates of different marketing communication approaches.
9. Marketing tools extend an invitation to constituents. Make sure you are prepared to follow through when you receive a reply. Lack of follow through ranks among the worst marketing communications errors (pp. 46-49).

Arden and Whalen (1991) report that promotion using direct mail continues to grow and to produce results. They conclude that most people do open their mail, and if your message catches their eye and their interest, they will respond. They further describe the nature of direct mail by stating that:

Direct mail publications can range in form from elaborate four-color brochures to the hard-working post card. Letters, self-mailers, tabloid newspapers, posters, folders, and many other forms are used to try to communicate directly through the mail with an elusive audience. (p. 67)

#### Student Tracking Systems to Support Communications

Crockett (1995) suggests that a tracking system should support the ability of a college to qualify or determine the likelihood of each prospective student to enroll (p. 5). Kobs (1991) proposes that if an organization is going to make the investment in building a database, it should be viewed as a "strategic weapon,"

and if used to its maximum capability, would be one of the best marketing investments an organization could make (p. 287). Kobs (1991) continues by stating that "fortunately, new relational database software is making it easier for sophisticated direct marketers to perform complex, multi-dimensional queries very rapidly--greatly enhancing the actionable value of the stored data" (p. 286).

Arden and Whalen (1991) point out that with the daily accessibility of accurate computerized records, it is possible to move from the concept of direct mail to "carefully directed mail." Institutions are now able to target select audiences rather than using the "shotgun approach" which is extremely ineffective and inefficient (p. 75).

#### Institutional Image and Its Impact on College Choice

Pappas and Shaink (1994) define image as "the sum of all perceptions and expectations that people in the community have of the college. The image is an opinion, based in part on what these individuals see or know about your college and other similar colleges" (p. 8). As stated by Sevier (1994), "... astute administrators have borrowed a page from business' playbook and learned that their institution's image or reputation is one of their most precious and powerful marketing tools" (p. 60).

Despite the numbers of people served across the country in two-year community and technical colleges, the image of these institutions remains unclear to much of the nation's populace. Trustees, leaders, and staff have an obligation to ensure that the mission and contributions of these colleges are better understood by the communities they serve (Simone, 1993, p. 9). Sevier (1994) proposes that "smart, aggressive, well-administered institutions do not leave their images to chance" (p. 74) and went on to further suggest the following:

Image management begins by accepting the fact that an institution's most significant asset is its image. Image management recognizes that an

institution's image must be continually built and maintained--when people hear your institution's name, they immediately should have a clear idea about who and what you are. (p. 64)

With regard to the image of vocational-technical education, Aring (1993) makes the following commentary:

In the United States, vocational is a dirty word with negative connotations that are deeply imbedded in language and culture. Unlike the Germans, who consider all education vocational because it leads to an occupation, Americans tend to associate "vocational education" with narrow training for marginal students and to think of it as preparation for manual, low-status work, or at best, work in the blue-collar trades. (pp. 396-397)

Kent (1996) points out that a recent market research study conducted by the American Association of Community Colleges stated that "American society has long placed, and continues to place, tremendous value on a baccalaureate education. Societal perceptions dictate that anything less is second rate, and thus, institutions offering non-baccalaureate programs are perceived as second rate" (p. 33).

Institutional image can significantly influence decisions to inquire and apply for admission to colleges. It is formed by a collection of perceptions, real or imagined, that are based on awareness of and experience with the college and can be defined as the position that the college occupies in the minds of prospective students or their influentials (Williams & Crockett, 1993, p. 46). From the market research work conducted for community colleges, Kent (1996) indicates that the preferred message among all of their respondents was "community colleges are prepared today to teach our workforce for tomorrow" and other messages that would be well received include access, responsiveness, and affordability (p. 35).

Sevier (1994) contends that "... image has a tremendous and often underappreciated effect on college choice" and his on-going research shows that college students generally offer four reasons for choosing the college they did: image or reputation, location, cost, and the availability of a specific major. When

forced to choose between their top four reasons, image is consistently chosen (p. 61).

Kent (1996) discusses the need for community colleges to develop a cohesive and consistent public image comparable to what four-year colleges have enjoyed for years, but that they must define themselves based on their own compelling missions, and not by comparing themselves to the four-year institutions. She proposes that community colleges articulate their messages "far more consistently and insistently than has been done before" (p. 36).

As depicted in Figure 1, Sevier (1994) presents what he refers to as the image formula which includes the following elements: (a) accuracy--it is imperative that everything you say about yourself is accurate, truthful, and demonstrable; (b) clarity--messages need to be clear and understandable, people need to know why they are receiving the message and what they are expected to do next, and they need to successfully compete with other messages to be read; (c) consistency--say the same thing about yourself over and over and over, through your logo, family look, fact sheets, advertising, etc.; and (d) continuity--images take years to develop through accurate, clear, and consistent themes and messages (pp. 65-66).

Accuracy + Clarity + Consistency x Continuity
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Figure 1. The image formula.

## Market Research

### Using Market Research to Improve Service

The Quality movement has moved into the North American educational sector in the last few years. A key component of that quality revolution is the identification of students and other clients as customers. As many colleges become more committed to a marketing orientation, they have come to realize that colleges that succeed in the 1990s will do so by staying close to its customers. Staying close is achieved by continuously consulting customers and clients and learning their opinions and attitudes on the quality of products, programs, and services. (Rahilly, 1992, p. 1)

"To market their institutions effectively, college advancement professionals need to understand that marketing encompasses several specific activities and begins with the customer's needs, not the institution's" (Hall, 1993, p. 30). Ryan (1993) states that "research means information, which can provide criteria for making decisions" and is often very threatening to change-resistant professionals (p. 40).

Rahilly (1992) points out that market research techniques have long been used by marketers to keep them in touch with their customers, and believes that quality and service can be improved by obtaining feedback from those who use your services (pp. 6-7). Disend (1991) further supports using market research to improve service by stating that "service-oriented organizations also realize that exceptional service is not what THEY think it is, it's what the customer perceives it to be" (p. 110).

### Using Market Research to Understand Customer Perceptions

"Service quality is largely determined by customer perceptions--their beliefs about what they're getting compared to what they expected to get. Perceptions are highly subjective. They may not be logical, accurate, or fair, but they're real and they're powerful" (Disend, 1991, p. 104).

In the research work of Trawick and Powers (1992), various measures of customer interaction in terms of colleges' performance with prospective students were considered, including: (a) attitude, or the general demeanor and approach in handling the inquiry, (b) friendliness, or the congeniality of the college, (c) speed, or the rapidity in the handling of the questions or concerns of the student/parent, (d) knowledge, or the level of information that the college provided, and (e) offer, or the willingness of the institution to provide further information or refer the person to other sources of information within the college (p. 14). Spanbauer's (1992) work as discussed in A Quality System for Education, considers several determinants of quality that customers tend to use when they evaluate services including reliability, responsiveness, competence, access, courtesy, and communications (p. 39). Boone and Kurtz (1992) describe five variables that have been identified as determining service quality: (a) tangibles--physical evidence of the service, (b) reliability--consistency of performance and dependability, (c) responsiveness--willingness and readiness of employees to provide service, (d) assurance--the confidence communicated by the service provider, and (e) empathy--the service provider's efforts to understand the customer's needs and then individualize the service delivery (p. 374).

Spanbauer (1992) contends that satisfaction surveys should be conducted, but argues that "asking customers if they are satisfied in a survey generally isn't enough because surveys don't generally identify customer expectations and they don't assess performance relative to competitors" (p. 38). However, questionnaires using Likert scales can successfully measure attitudes or opinions (Suskie, 1992, p. 19), the basis of perceptions. "Much of the research in higher education consists of conducting one survey of one sample of people and describing (or perhaps explaining or exploring relationships among) the results" (Suskie, 1992, p. 11).

Rahilly (1992) proposes a research design model to develop a successful survey project that involves eight steps:

1. Determine the research objectives, considering how the information gathered will be used, the decisions that need to be made, and the follow-up actions that will need to be taken.
2. List the needed data or the questions that need to be answered.
3. If necessary, make a preliminary investigation such as conducting focus groups or a pilot of the survey.
4. Determine who is to be surveyed and how they will be selected.
5. Select the appropriate type of survey (telephone, mail, or personal interview).
6. Create the questionnaire and test it.
7. Collect the data.
8. Analyze the data (pp. 4-5).

#### Questionnaire Design to Enlist Customer Feedback

Busche (1995) defines a questionnaire as a “pre-formatted, written set of questions to which the respondent records his or her answers usually within rather closely defined alternatives” (p. 1). Ryan (1993) contends that most research is unnecessarily complicated and recommended assigning only one purpose to a single survey or questionnaire (p. 43).

In reaching conclusions in research and evaluation studies, Isaac and Michael (1990) indicate that the mailed questionnaire “is the single most widely used technique in education. It requires a careful, clear statement of the problem underlying the questionnaire. Otherwise, ambiguity and misinterpretation will invalidate the findings” (p. 133). McCarthy and Perreault (1993) also concur that mailed questionnaires are the most common and convenient quantitative research methodology (p. 156). Isaac and Michael (1990) point out some of the

advantages and disadvantages to mailed questionnaires. In terms of advantages, questionnaires: (a) are inexpensive, (b) are wide-ranging, (c) can be well designed, simple, and clear, (d) are self-administering, and (e) can be made anonymous. By way of disadvantages, questionnaires: (a) can have low response rates, especially with less educated and older addressees, inviting a nonrepresentative return, (b) provide no assurance that the questions were understood, and (c) provide no assurance that the addressee actually was the one who responded to the questions (p. 130). Additionally, McCarthy and Perreault (1993) suggest that questions must be simple and easy to follow since no interviewer is there to clarify, getting a good response rate can be difficult with mailed questionnaires, and that getting the surveys returned can take too much time for some decision-making (p. 157).

Surveys should be designed in such a way that they are easy for people to complete, for data entry people to follow, and for researchers to analyze (Rahilly, 1992, p. 6; Ryan, 1993, p. 43). Ryan (1993) further suggests that to achieve this, it is important to include precise directions, avoid ambiguous language, and make response scales consistent (p. 43).

### Questionnaire Development

A common approach to measuring customers' attitudes and opinions is to have respondents indicate how much they agree or disagree with a questionnaire statement on a given scale (McCarthy & Perrieault, 1993, p. 156; Suskie, 1992, p. 19). "Scales are used extensively in questionnaires because they allow fairly accurate assessments of beliefs or opinions" (McMillan & Schumacher, 1993, p. 244). McCarthy and Perrieault (1993) suggest that another approach is to have respondents rate a product, service, or feature (p. 156). Many researchers advocate the Likert scale, as it offers five choices ranging from, for example, "strongly disagree" to "strongly agree" or "very dissatisfied" to "very satisfied"

(Ryan, 1993, p. 43). McMillan and Schumacher (1993) indicate that the Likert scale is the most widely used model (p. 244). They also discuss the issue of whether the neutral choice should be included in a true Likert scale, and generally conclude that it is better to include this neutral choice versus forcing the respondent to make a positive or negative choice, or not respond at all (p. 246).

McMillan and Schumacher (1993) discuss the importance of clearly defining the objectives of the questionnaire, including questions that have been thought through properly in terms of their relationship to the objectives, considering how the results will be analyzed and used for each question (p. 240). "A survey is a quantitative measuring instrument and should contain questions that gather primarily quantitative data" (Rahilly, 1992, p. 5). In Figure 2, Rahilly (1992) provides a number of guidelines for developing survey questions (p. 6).

McMillan and Schumacher (1993) suggest some additional guidelines for writing effective questions including avoiding double-barreled questions with two or more ideas and avoiding negatively stated items (pp. 240-241). Suskie (1992) also proposes that to avoid ambiguity, make as many items as possible concrete or "behavioral," asking for a specific behavior rather than a feeling or opinion (p. 31).

Rahilly (1992) recommends that demographic questions, like income and age, be placed at the end of the questionnaire (p. 6), although Ryan (1993) cautions researchers to avoid certain demographic information in market research unless it is absolutely needed. His experience indicates that people increasingly resent being asked for their gender, salary, age, or race if it is not directly relevant to the survey's stated purpose (p. 40).

Isaac and Michael (1990) propose that "lengthy subjective, open-ended answers are difficult for the respondent to write and for the investigator to evaluate. If the possible categories of responses can be anticipated, these should be offered as alternatives to an objective question" (p. 133). McMillan and

Schumacher (1993) concur that a closed form whereby respondents choose between predetermined responses is much easier to score and can also be answered more quickly by the respondents (p. 243).

Elements to Incorporate	Elements to Avoid
Questions kept as short as possible	Too many open-ended and yes/no questions
Use of everyday words	Biased questions
Only necessary questions	Questions needing too much reliance on memory
Questions that have a reasonable chance of being answered truthfully	Ambiguous, embarrassing, confusing, threatening, or offensive words
Structured questions with a list of alternatives that can be checked	Questions that invite respondents to seek prestige by their answers
Use scales where possible	
Start with general or more interesting questions before moving to the specific	

Figure 2. Guidelines for developing questions.

The overall layout and format of the questionnaire is very important to its effectiveness. Figure 3 presents a set of questionnaire formatting rules developed by McMillan and Schumacher (1993) (p. 242).

- Carefully check grammar, spelling, punctuation, and other details.
- Make sure printing is clear and easy to read.
- Make instructions brief and easy to understand.
- Avoid cluttering the questionnaire by trying to squeeze many items onto each page.
- Avoid abbreviated items.
- Keep the questionnaire as short as possible.
- Provide adequate space for answering open-ended questions.
- Use a logical sequence, and group related items together.
- Number the pages and items.
- Use examples if the items may be difficult to understand.
- Put important items near the beginning of a long questionnaire.
- Be aware of the way the positioning and sequence of the questions may affect the responses.
- Print response scales on each new page.

Figure 3. General format rules for questionnaires.

Suskie (1992) also recommends that putting text in two columns rather than running it across the page makes the survey easier to read, as well as using plenty of white space through generous margins and spacing (p. 39). In terms of the format of the question items, McMillan and Schumacher (1993) suggest that "the clearest approach is to write the item on one line and to place the response categories below, not next to, the item." They also suggest using boxes, brackets, or parentheses rather than lines to indicate where to mark the item (p. 248).

### Strategies to Optimize Response Rate

Suskie (1992) discusses four factors that are most likely to affect the response rate to a survey instrument. These factors include the topic of the survey, the people being surveyed, how considerate you are of your respondents, and how professional and important the study appears (p. 25).

Several authors address what constitutes an acceptable response rate for a mailed questionnaire. At least a 50% response rate is needed for a survey to be statistically useful, 60-69% is considered a good response rate and 70% or greater is considered very good (Busche, 1995, p. 4; Ryan, 1993, p. 43; Suskie, 1992, p. 46). Rahilly (1992) contends that "a good introduction, cover letter, etc. with good follow-up should move response rates over 60%" (p. 6).

To avoid problems that inevitably arise with surveys, all of the authors on questionnaire development recommend conducting a pilot test or pretesting the questionnaire before using it in a study. The purpose of the pilot test is to help eliminate any difficulties with the survey's design by piloting it with a group of respondents similar to the actual subjects who will be completing the questionnaire in the formal study. The pilot test attempts to answer questions about the clarity of the questions, ease of completing, and the length of time it takes to complete the instrument (McMillan & Schumacher, 1993, pp. 249-250; Ryan, 1993, p. 43; Suskie, 1992, pp. 44-45).

Suskie (1992) contends that "good research practices dictate that most surveys should be confidential: results are processed and reported in such a way that individual responses cannot be identified" (p. 12). The concept of anonymity is also supported by Rahilly (1992) who states that "usually, the response rate is better for anonymous questionnaires. In any case, at least give a guarantee of confidentiality" (p. 6).

### Summary

Post-secondary educational institutions currently face intense competition for attracting prospective students to their campuses and programs. Vocational-technical colleges have the additional challenges associated with the continuing stereotypes of vocational-technical education as being second rate to baccalaureate level pursuits, despite the changing demands of the workplace. This competition for students is causing colleges to become more market-driven and customer-responsive than ever before.

Customer service becomes important in making a favorable impression on prospective students in higher education. The communications with prospective students need to be well managed, extremely responsive, and should be comprehensive to include personal, written, and telephone contacts. This communication process is how the institution positions itself in the marketplace and in the minds of prospective students and their key influencers. The number of contacts need to be sufficient enough to allow the development of a relationship between the college and the prospective student. A targeted approach to marketing communications is likely to be much more successful and cost effective by focusing the marketing resources on those most likely to apply and enroll at the institution. To implement such a targeted marketing approach, a systematic process is desirable, utilizing computer technology applications to support the kind of record keeping and information development that is needed.

The image of an institution has a powerful influence on a student's college choice decision. The difficulty with image is that it is based on perception, not necessarily logic or reality. A college needs to make a concerted effort at managing its image, primarily through the marketing communications and messages it sends to its constituencies. It becomes critically important that the

messages sent match the reality experienced by customers as they encounter and are served by the college.

Through market research, organizations can and must stay close to their customers and prospective customers. Through these efforts, an organization can better understand customers' opinions, attitudes, and level of satisfaction, with the ultimate goal of improving quality and service. A widely use method of gathering information on customers' attitudes, opinions, and perceptions is the use of questionnaires or surveys.

To be effective, a questionnaire needs to be well designed both in terms of content and format, it needs to be as brief and user-friendly as possible to encourage respondent completion, and widely accepted guidelines for question item development should be adhered to. Additionally, steps should be taken to optimize the response rate to any questionnaire including following good design principles, ensuring confidentiality to respondents, and pilot testing the instrument. The literature survey provides a significant amount of direction for questionnaire design and development per the guidelines and recommendations outlined by various authors and researchers in this field.

## Chapter 3

### METHODOLOGY AND PROCEDURES

Eight procedures were used to complete this development practicum. First, a review of the literature was conducted. The review included the focus areas of questionnaire design and development, marketing communications, image as a factor in college choice, student tracking systems to support marketing, and customer service.

Second, several questionnaires developed by Fox Valley Technical College's (FVTC's) research and evaluation staff for similar purposes were reviewed. An appropriate institutional format and data scanning process were identified with the concurrence of the college's director of research, planning, and development.

Third, criteria were established for the evaluation of the questionnaire being developed. The criteria were based on information from the literature review and input from FVTC's director of research, planning, and development and manager of marketing services. This was done in a two hour face-to-face meeting with criteria elements brainstormed, prioritized, and selected.

Fourth, the criteria established were put through a validation process, both in terms of content and face validity. To establish content validity, the criteria were reviewed by FVTC's director of research, planning, and development, manager of marketing services, the director of research, planning and development from Milwaukee Area Technical College in Milwaukee, Wisconsin, and the vice president of college relations and development at Western Wisconsin Technical College in LaCrosse, Wisconsin. The draft criteria were sent in writing to these individuals asking for their feedback as to whether they were reasonable and clear, if they were valid from their perspective, and if they were sufficiently inclusive. Their feedback was requested and provided in writing or through the use of electronic mail.

To establish face validity of the criteria, four current program students at FVTC reviewed and provided input on the criteria. The students were identified by the manager of marketing services. The student review and input was done in a face-to-face meeting with the vice president of marketing and economic development. A complete listing of the validators was included in this report (see Appendix A).

Fifth, a formative committee was established to provide feedback and ensure alignment with the criteria during the questionnaire development process. The formative committee consisted of FVTC's director of research, planning, and development, manager of marketing services, the director of research, planning and development at Milwaukee Area Technical College, and the vice president of college relations and development at Western Wisconsin Technical College (Appendix B).

Sixth, a draft of the questionnaire was developed by the vice president of marketing and economic development with substantive assistance and review by the formative committee. The draft attempted to address all of the project criteria that were established. Also developed at this step were the cover letter, the return envelope, and the envelope that would be used for the mailing of the questionnaire. The initial draft of the questionnaire was completed in September, 1996.

Seventh, a summative committee was called upon to validate the questionnaire by comparing the draft of the product to the established criteria through a written feedback mechanism. This feedback mechanism was included as Appendix C of this report. The summative committee included FVTC's evaluation specialist, director of research, planning, and development, and manager of marketing services; the supervisor of research and planning from Madison Area Technical College in Madison, Wisconsin, the director of marketing

services at Northcentral Technical College in Wausau, Wisconsin, and the manager of marketing and communications services at Moraine Park Technical College in Fond du Lac, Wisconsin (see Appendix D). The summative committee also validated the content of the product by providing written feedback on both the substance and presentation of the questionnaire. The face validity of the draft was addressed by piloting the questionnaire with a small number of prospective student inquiries from the pool of individuals in the EMAS (Enrollment Management Action System) database who had completed the college's communications flow process within the last six months. In November, 1996 the pilot group of prospective student inquiries was asked to complete the questionnaire, to provide feedback on any of the directions or questions that they found to be unclear or ambiguous, as well as how long it took them to complete the questionnaire. This feedback was asked for in a written evaluation form included in the pilot questionnaire mailing (Appendix E).

Eighth, based on the feedback from the summative committee and pilot testing of the questionnaire conducted in the seventh procedure, the questionnaire draft was revised. A copy of the final questionnaire was included as Appendix F of this report.

Although it was originally anticipated that this study and related procedures would be conducted and completed during the summer of 1996, this timeframe proved to be unrealistic given the time it took to get responses and feedback from the number of people involved and the other demands on the developer's time from the institution. The procedures of the study were conducted from May through December, 1996.

#### Assumptions

For this practicum, it was assumed that the individuals serving as validators of the criteria established for this questionnaire, as well as the formative

committee, would have the knowledge and expertise to guide the development of this study. It was also assumed that this study would be valid within the context of Fox Valley Technical College and that this project was a priority for development within the college.

#### Limitations

The product of this study was limited in that it was specific to the needs of Fox Valley Technical College and its marketing communications functions. Another limitation was that the results or outcomes of the study were dependent on establishing sound criteria as the basis for evaluating the questionnaire being developed.

## Chapter 4

### RESULTS

The outcome of each procedural step conducted in this developmental study is described in the following paragraphs. The review of the literature (Chapter 2) included sections on customer service and prospective college students, institutional image and its impact on college choice, market research, and questionnaire design to enlist customer feedback. The review of literature validated the need for Fox Valley Technical College (FVTC) to develop an evaluation instrument for use in evaluating its marketing communications with prospective student inquiries.

Seven different questionnaires that had been developed by Fox Valley Technical College's (FVTC's) research and evaluation staff for similar purposes were reviewed. A complete listing of these questionnaires was included as Appendix G of this report. The developer also discussed the appropriate institutional format and data scanning process for this questionnaire with the college's director of research, planning, and development. This resulted in the decision to develop the questionnaire in a format using Microsoft Word software, and that a scannable format would not be used as it is not yet available in the institution and also due to the fact that, when administered, the questionnaire volume was not anticipated to be high based on the total population of prospective student inquiries.

A set of draft criteria were established for the questionnaire by the manager of marketing services and the director of research, planning, and development at FVTC. The draft criteria were identified using the literature review and through an initial brainstorm process facilitated by the vice president of marketing and economic development. The criteria included both content criteria and construct criteria for the questionnaire (see Appendix H).

The draft criteria established were put through a validation process. To establish content validity, the criteria were reviewed by FVTC's director of research, planning, and development, manager of marketing services, the director of research, planning and development from Milwaukee Area Technical College in Milwaukee, Wisconsin, and the vice president of college relations and development at Western Wisconsin Technical College in LaCrosse, Wisconsin. The results of this review indicated that the criteria were very comprehensive and appropriate for this study. The only suggested change was to add a content criterion that addressed the level of personalization in the marketing communications.

Four current program students at FVTC reviewed and provided input on the criteria in a face-to-face meeting with the vice president of marketing and economic development. The feedback from this group regarding the face validity of the criteria indicated that the criteria were clear, inclusive, and on target. The group confirmed that the questionnaire needed to allow for a quick response using a rating scale versus using open ended questions. The criteria were finalized after this validation process in August, 1996, and the complete listing is found in Appendix H of this report.

The formative committee was established in September, 1996 and used to provide feedback and ensure alignment with the criteria during the questionnaire development process. Most of the review work of the formative committee was done through the mail and through electronic communications. The development of the questionnaire, as well as the review and feedback on the questionnaire occurred during September and October, 1996. The instrument was developed to include all of the components that were identified in the project criteria.

In October, 1996, the summative committee was asked to validate the questionnaire by comparing the draft of the product to the established criteria through a written feedback mechanism. Evaluative feedback from the summative

committee indicated that, generally, most of the criteria were sufficiently met. However, a number of suggestions were made in this review. In terms of construct criteria, some minor wording changes were recommended for the cover letter; adding a response date in the letter was suggested; some enhancements were proposed to increase clarity of the questionnaire instructions; addressing parallel construction in the wording of items in one section was mentioned; stating the guarantee of confidentiality on the questionnaire itself was proposed; and one evaluator expressed some concern about the lack of detail in the response scale. In terms of the content criteria, one evaluator recommended asking for more demographic information that provided more data on respondent age and race; and another evaluator suggested that a follow-up item be added to provide the opportunity for respondents to explain why, if their overall impression of the college was rated low in terms of being favorable.

In November, 1996 the questionnaire, along with a cover letter (Appendix I) and a written evaluation form was mailed to 25 prospective student inquiries from the pool of individuals in the EMAS (Enrollment Management Action System) database who had completed the college's communications flow process within the last six months. This pilot mailing resulted in one response. Because of the low response rate a second pilot mailing was done with another 24 individuals from this prospective student pool in December, 1996 which resulted in attaining three responses. The total of four respondents all provided positive feedback on the survey, indicating that it was easy to complete, took five minutes or less to complete, directions and items were clear, and that the scale was easy to use.

Finally, based on the feedback from the summative committee and pilot testing of the questionnaire, the draft was revised with the review and consultation of the formative committee. Changes that were made to the cover letter included a minor wording change in the opening paragraph and adding a

sentence that indicated a date by which the survey should be returned. Changes that were made included adding one more level of breakdown to the age demographic item, changing some wording of items for parallel construction, and reordering several items at the end so that the questionnaire concluded with demographic questions only. Additionally, one question that was in a descending scale order when all others were in ascending scale order was reordered for consistent question alignment. One of the items was also broken out into two items to separately address respondents' feedback on mailings and telephone communications. A couple of recommended changes were not made to the questionnaire. First, race was not added as a demographic item for several reasons: (a) formative committee members felt that questions regarding race are sometimes offensive to people, (b) in the population area being surveyed with this instrument, there is extremely limited racial diversity, and (c) this data element was not perceived to have a direct usefulness in the study. One summative committee member also recommended that the word "timeliness" in a questionnaire item was ambiguous and should be changed. It was determined that this attribute, as well as all of the others, needed to be addressed from the respondents' judgment and that further work to define the degree to which the attribute existed or occurred would not be productive. The final draft of the questionnaire, which addressed the research question including appropriate and valid content for evaluating FVTC's marketing communications with prospective students, was included as Appendix F of this report.

## Chapter 5

### DISCUSSION, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

#### Discussion

The literature on competition for students in post-secondary education seemed to suggest that customer service and positively influencing customer choice have become important factors in higher education. In this regard, the communications with prospective students need to be well managed, extremely responsive, and should be comprehensive enough to include variety in the type of contacts made. The literature provided a significant amount of direction for questionnaire design and development, and indicated that questionnaires or surveys are widely used methods of gathering information on customers' attitudes, opinions, and perceptions.

The results of this study confirmed the need for a two-year technical college, and specifically for Fox Valley Technical College (FVTC), to evaluate its communications with prospective students inquiries and to develop an instrument to be used in such an evaluation. Key components of an effective questionnaire for this purpose were quite evident in the literature, both from a content perspective and a construct perspective, and essentially served as the criteria for the questionnaire.

All of the sources on questionnaire development reviewed in the literature recommended conducting a pilot test or pretesting the questionnaire before using it in a study. Pilot testing of the instrument was done with a sample group of the actual population that would eventually be targeted as part of an evaluation. The purpose of the pilot test, as indicated in the literature on survey administration, was to eliminate any difficulties with the instrument design such as clarity, length, and ease of completion. This pretesting step assisted in developing a sound

questionnaire instrument that is now available for use in the evaluation of the college's marketing communications with prospective student inquiries.

### Conclusions

Through this development process, the appropriate and valid content of a questionnaire to evaluate FVTC's marketing communications with prospective student inquiries was determined. The questionnaire needed to address respondents' opinions, attitudes and perceptions related to the survey purpose, including the basic determinants of service quality (the extent to which the service is timely, helpful, informative, and friendly). The questionnaire needed to address specific attributes as well as general impressions, including respondents' overall impression of the college. It also needed to address the extent to which the communications are personalized. The focus needed to be limited to mailings and telemarketing as forms of contact. Finally, the questionnaire needed to include necessary demographic and admissions status items.

The questionnaire that was developed based on the identified content and construct criteria should serve as a viable evaluation instrument for FVTC in providing the kind of customer feedback the college is desirous of attaining relative to its marketing communications. However, based on the pilot survey conducted, a very low response rate was achieved through the direct mail process. From the pilot feedback received, this did not seem to be a factor of length or complexity of the survey instrument.

The questionnaire, developed with the input of professionals beyond the scope of the college's staff, should have resulted in a more credible product than had it been developed more exclusively within the college. Having pilot tested the instrument and considering the summative committee feedback, final modifications were made to the questionnaire. The instrument has been tested for both validity and reliability and is ready to be used in a subsequent evaluation study.

### Implications

The completion of this questionnaire instrument will enable FVTC to conduct a comprehensive evaluation of its marketing communications with prospective student inquiries from the customer perspective. With this kind of customer feedback, the college will have the opportunity to make adjustments in its processes, materials, or communications for this important group of potential customers to more positively influence their college choice decisions. The limited response rate achieved from the direct mail pilot survey, however, would suggest that attaining an adequate response rate in a full survey of this particular population may be very difficult. Consideration should be given to conducting this survey, using the questionnaire developed, as a telephone survey.

The development and implementation of this questionnaire will serve to reinforce the importance of customer service and meeting customer needs as a core operational value of FVTC. The questionnaire design should allow for substantive feedback that can be quantified and point to areas for continuous improvement in the college's marketing communications.

Finally, this questionnaire could serve as a developmental process model, as well as a product model, for other post-secondary educational institutions. Such an instrument could be beneficial to a number of institutions if the literature is accurate in expressing the importance of colleges embracing a customer orientation to compete more effectively in post-secondary education.

### Recommendations

It was recommended that the questionnaire instrument developed be utilized in a subsequent evaluation study of FVTC's marketing communications with prospective students in early 1997. The questionnaire was designed to be used as a direct mail survey to students who have made an inquiry of the college and have received the full range of marketing communications within the last six months.

Based on the very limited response rate to the pilot test mailing, it was recommended that this questionnaire survey, instead, be conducted as a telephone survey to attain an adequate response rate with the targeted population. The vice president of marketing and economic development should undertake this subsequent study within the next six months.

It was recommended that the ultimate results from an evaluation utilizing this questionnaire instrument be analyzed, communicated to appropriate internal staff, and used as the basis of any change or improvements in the current marketing communication process. It was further recommended that the vice president of marketing and economic development ensure the use of this evaluative information, sharing the kind of impact that customer feedback data can have on internal processes with appropriate college staff.

It was recommended that additional research be considered in conducting a quasi-experimental research study of the extent to which the college's marketing communications with prospective students are actually influencing their application to the college, and subsequently enrolling. Such a study could compare the application and enrollment results of two different marketing communication strategies. Such a study should be considered by the manager of marketing services once the evaluation study has been completed.

Finally, it was recommended that elements of this literature review, questionnaire development process, and/or actual questionnaire instrument could be shared by the developer with the professional education community once this practicum report has been approved and accepted. This dissemination of information could occur through local or national conference presentations, submission to the ERIC Reproduction Service, or making these products available to individuals upon request.

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## APPENDIXES

## Appendix A

### List of Validators

The following individuals reviewed and provided input into the criteria for the questionnaire developed.

#### Content Validity

Ms. Karen Laws	Manager, Marketing Services Fox Valley Technical College
Ms. Carol Mishler	Director, Research, Planning, and Development Fox Valley Technical College
Dr. Keith Roberts	Director, Research, Planning, and Development Milwaukee Area Technical College Milwaukee, Wisconsin
Ms. Dorothy Drake	Vice President, College Relations and Development Western Wisconsin Technical College LaCrosse, Wisconsin

#### Face Validity

Ms. Jennifer Polzin	Student - Marketing Program Fox Valley Technical College
Ms. Chris Merseh	Student - Marketing Program Fox Valley Technical College
Ms. Denise Mulvey	Student - Administrative Assistant Program Fox Valley Technical College
Ms. Rachel Zuleger	Student - Administrative Assistant Program Fox Valley Technical College

## Appendix B

Formative Committee

Members of the formative committee were selected based on their responsibilities in the organization and their experience in certain aspects of research and marketing. The following individuals served as formative committee members in the development of the questionnaire for the evaluation of Fox Valley Technical College's marketing communications with prospective student inquiries.

Ms. Karen Laws	Manager, Marketing Services Fox Valley Technical College
Ms. Carol Mishler	Director, Research, Planning, and Development Fox Valley Technical College
Dr. Keith Roberts	Director, Research, Planning, and Development Milwaukee Area Technical College Milwaukee, Wisconsin
Ms. Dorothy Drake	Vice President, College Relations and Development Western Wisconsin Technical College LaCrosse, Wisconsin

## Appendix C

Feedback Document - Summative Committee Review

**Fox Valley Technical College**  
**Questionnaire on EMAS Marketing Communications**

Please review the enclosed draft of FVTC's questionnaire, cover letter, and return envelope to be used in evaluating its marketing communications with prospective program students. Determine whether or not the following criteria have been met.

Construct Criteria	Sufficiently Meets Criteria? (check one)	Comments/Suggestions
1. Clearly worded instructions	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2. Clearly worded items that address only one element per item	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3. Questions kept as short as possible	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4. Vocabulary appropriate to the respondent group	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Neutrally worded items that avoid bias	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6. Format that is easily read and followed	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7. Maximum length of two pages	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8. Items on demographics placed at the end of the questionnaire	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9. Items progress from "easier to answer" to more "difficult to answer"	<input type="checkbox"/> Yes <input type="checkbox"/> No	

10. Cover letter and/or questionnaire clearly indicate the purpose of the survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	
11. Each item allows for the full range of response opinions	<input type="checkbox"/> Yes <input type="checkbox"/> No	
12. Format is uncluttered and incorporates economy of space	<input type="checkbox"/> Yes <input type="checkbox"/> No	
13. Incorporates few, if any, open-ended items	<input type="checkbox"/> Yes <input type="checkbox"/> No	
14. Related items are grouped together	<input type="checkbox"/> Yes <input type="checkbox"/> No	
15. Response scale is clearly labeled	<input type="checkbox"/> Yes <input type="checkbox"/> No	
16. Appropriate cover letter and return envelope developed for use with the questionnaire	<input type="checkbox"/> Yes <input type="checkbox"/> No	
17. Respondents are given a guarantee of confidentiality	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Content Criteria	Sufficiently Meets Criteria? (check one)	Comments/Suggestions
1. Questions address opinions, attitudes, and perceptions related to the purpose of the survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2. Covers the appropriate basic determinants of service quality (extent to which the service is timely, helpful, informative, friendly)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3. Addresses specific attributes as well as general impressions	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4. Contains at least one item soliciting the respondent's overall impression of the college	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Content is limited to marketing communications via mailings and telephone contact via telemarketing	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6. Contains necessary demographic and admissions status items	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7. Addresses the extent to which the service and follow-up are personalized	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Additional Comments/Suggestions:

Evaluator: \_\_\_\_\_

Date: \_\_\_\_\_

## Appendix D

### Summative Committee

The following individuals served as the summative committee for the purpose of reviewing the draft of the questionnaire developed against the established criteria for the instrument.

Ms. Karen Laws	Manager, Marketing Services Fox Valley Technical College
Ms. Carol Mishler	Director, Research, Planning, and Development Fox Valley Technical College
Ms. Janet Perry	Evaluation Specialist Fox Valley Technical College
Mr. Tom Heaney	Supervisor, Research and Planning Madison Area Technical College Madison, Wisconsin
Dr. Keith Roberts	Director, Research, Planning, and Development Milwaukee Area Technical College Milwaukee, Wisconsin
Mr. Ed Osborn	Manager, Marketing and Communications Services Moraine Park Technical College Fond du Lac, Wisconsin

## Appendix E

Questionnaire Pilot Feedback Form***SURVEY FEEDBACK QUESTIONS***

1. Was the survey easy to complete? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
2. How long did it take to complete? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. Were the directions clear? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. Were any of the items unclear or ambiguous? Which ones? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
5. Was there anything you *wished* a survey on this topic had asked you about that was not mentioned? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
6. Was the scale easy to use? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
7. Do you have any suggestions for improving this survey form? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Appendix F

Questionnaire

**Your Impressions  
of Fox Valley Technical College Communications**

Please take a minute to answer the following questions. We are interested in whatever you can recall, even if you haven't enrolled at Fox Valley Technical College (FVTC).

1. Shortly after your initial inquiry, you received some material from FVTC (letters, brochures, catalogs, etc.). Recalling the best you can, how would you rate those mailings for:

	Poor				Excellent	Can't Recall
a) Timeliness of the mailing(s)	1	2	3	4	5	<input type="checkbox"/>
b) Amount of material mailed	1	2	3	4	5	<input type="checkbox"/>
c) Frequency of mailings	1	2	3	4	5	<input type="checkbox"/>
d) Helpfulness of mailing(s) in answering your questions	1	2	3	4	5	<input type="checkbox"/>
e) Attractiveness of the material	1	2	3	4	5	<input type="checkbox"/>
f) Uniqueness of the material (being different from other colleges')	1	2	3	4	5	<input type="checkbox"/>
g) Friendly, inviting tone	1	2	3	4	5	<input type="checkbox"/>
h) Personalized to you	1	2	3	4	5	<input type="checkbox"/>
i) Clear about next steps	1	2	3	4	5	<input type="checkbox"/>
j) Understandable	1	2	3	4	5	<input type="checkbox"/>
k) Overall impression	1	2	3	4	5	<input type="checkbox"/>

2. Do you recall receiving a telephone call from someone at FVTC who offered to answer questions?

- ☐ Yes-----Go to Question 3  
☐ No-----Go to Question 5  
☐ Not Sure-----Go to Question 5

OVER➔

3. If you received a telephone call, how would you rate the FVTC caller for...

	Poor					Excellent	Can't Recall
	1	2	3	4	5		
a) Knowledge of FVTC	1	2	3	4	5		<input type="checkbox"/>
b) Helpfulness	1	2	3	4	5		<input type="checkbox"/>
c) Friendliness	1	2	3	4	5		<input type="checkbox"/>
d) Calling at a good time	1	2	3	4	5		<input type="checkbox"/>

4. Did you appreciate receiving a call?

- ☐ Yes  
☐ No

5. Based solely on the mailings and/or the phone call you may have received, what was your overall impression of FVTC?

Not at all Favorable				Very Favorable		Can't Recall
1	2	3	4	5		
						<input type="checkbox"/>

If rated a 1 or 2, why do you give that rating? \_\_\_\_\_

6. Did the mailings change your perception of FVTC?

- ☐ Improved my impression  
☐ Did not change my impression  
☐ Made my impression worse

7. Did the telephone call(s) change your perception of FVTC?

- ☐ Improved my impression  
☐ Did not change my impression  
☐ Made my impression worse  
☐ Could not recall

*Now, just a few questions for classification...*

8. Have you...

- ☐ Applied to a program at FVTC, but not enrolled  
☐ Enrolled in a program at FVTC  
☐ Neither applied nor enrolled

9. Age:

- ☐ Under 18  
☐ 18 - 24  
☐ 25 or older

10. Gender:

- ☐ Male  
☐ Female

## Appendix G

### Review of Other Questionnaires

The following questionnaires which had been designed and implemented by Fox Valley Technical College's research and evaluation department were reviewed as part of this development practicum.

Bordini Center Customer Service Survey (1993)

Student Satisfaction with Academic Advising (1994)

Graduate Supervisor Survey (1992)

Recognition Programs at Fox Valley Technical College: How Effective? (1994)

Goal Oriented Adult Learning Evaluation (1994)

Adjunct Faculty Satisfaction Survey (1995)

Your Reaction to 1992 Operational Planning (1992)

## Appendix H

### Criteria for the Questionnaire on Marketing Communications

The following criteria were established for the questionnaire on marketing communications.

#### Construct Criteria

1. Clearly worded instructions
2. Clearly worded items that address only one element per item
3. Questions kept as short as possible
4. Vocabulary appropriate to the respondent group
5. Neutrally worded items that avoid bias
6. Format that is easily read and followed
7. Maximum length of two pages
8. Items on demographics placed at the end of the questionnaire
9. Items progress from "easier to answer" to more "difficult to answer"
10. Cover letter and/or questionnaire clearly indicate the purpose of the survey
11. Each item allows for the full range of response opinions
12. Format is uncluttered and incorporates economy of space
13. Incorporates few, if any, open-ended items
14. Related items are grouped together
15. Response scale is clearly labeled
16. Appropriate cover letter and return envelope developed for use with the questionnaire
17. Respondents are given a guarantee of confidentiality

#### Content Criteria

1. Questions address opinions, attitudes, and perceptions related to the purpose of the survey

2. Covers the appropriate basic determinants of service quality (extent to which the service is timely, helpful, informative, friendly)
3. Addresses specific attributes as well as general impressions
4. Contains at least one item soliciting respondents' overall impression of the college
5. Content is limited to marketing communications via mailings and telephone contact via telemarketing
6. Contains necessary demographic and admissions status items
7. Addresses the extent to which the service and follow-up are personalized

## Appendix I

Cover Letter

November 15, 1996

«Title». «FirstName» «LastName»  
«Address1»  
«City», «State» «PostalCode»

Dear «FirstName»,

Recently you requested information about Fox Valley Technical College. We would like you to give us your impressions of the material we mailed and the telephone call(s) we made to you in response to your initial inquiry about the college.

Please take a minute to complete the enclosed short survey and return it in the postage-paid envelope provided. Think back to the time of your request and recall the material you received in the mail as best you can. Your answers will remain confidential.

You have been selected as part of a small group of individuals to pilot this survey before we send it out to other prospective students. Once you have completed the survey, please take just a few more minutes to answer the *Survey Feedback Questions* on the other enclosure.

Your impressions will help us improve our communications to others interested in Fox Valley Technical College. Please return both questionnaires by **November 29**. Thank you for your time!

Sincerely,

Susan A. May  
Vice President  
Marketing & Economic Development

ltrEMAS/DM

Enclosures

P.S. We are interested in hearing from you even if you haven't enrolled at Fox Valley Technical College.



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